

G4SJH bio

Barry Lewis G4SJH



Barry has had a longstanding involvement in radio spectrum regulatory affairs with many years of experience working with international regulators both individually and collectively. Barry now uses this experience to support the work of the International Amateur Radio Union (IARU) on amateur radio spectrum matters and as the ‘Microwave Manager’ volunteer officer for the UK Radio Society of Great Britain (RSGB).

Barry is a keen home constructor and especially enjoys building and operating homebrew equipment for all bands from 3.5 MHz up to 24 GHz.

I0NAA bio

Mario graduated from the University of Bologna in January 1978 with honors in electronic engineering, discussing an experimental thesis on positional detection by electromagnetic radiation and he started to work in the memory division of Texas Instruments as semiconductor engineer.

He carried out his career in many offices of the Company in the United States, Japan, Germany and France and in the 90s he returned permanently to Italy taking the direction of the production of integrated high-scale integrated circuits in the Rieti plant of the Texas Instruments Italy.

In 2000 he began a collaboration with the electronics services company UTAC in Singapore, dealing with technical marketing holding the positions of President and CEO of UTAC Europe.

At the same time, he has always been a very active ham radio operator with the call sign I0NAA and in 2015 he installed a 5-meter parabolic antenna that is now fully dedicated to moon bouncing (EME) and to radio astronomy activity focused on the detection of Pulsars.

Mario is often invited as a speaker to talk about radio and technology at conferences and seminars and is also producing free software to support amateur radio and amateur radioastronomy communities.

He also contributed to the Amateur Radio Astronomy chapter of 2024 ARRL Antenna book.

JH1KRC bio

JH1KRC Michiaki Watanabe (Mike)

Born in 1956. When Mike was 10, his father presented him a brand-new SONY transistor radio with short wave range. Mike was excited to listen to short wave broadcasting, and one day noticed that radio signals become stronger when putting an electric cable onto the screw of plastic cabinet. This cable was extended to curtain rail, and then an inverted-L wire antenna. This seems to be the first experiment of Mike's antenna construction in his amateur radio carrier. He became a phone-class licensee when he was 11. First antenna for chasing DX was a single loop, then 2-element cubical quad for 15-m, and 4-element 10/15-m quad when he was 15. HF antenna exploitation lasted even after he became a medical doctor.

On day in 1984 Mike met JA9BOH, who introduced Mike how to operate AO-10 B-mode with two-yagi configuration in circular polarization, when Mike and his friends of The DX Family Foundation team operated BV0JA & BV0YL Taiwan expedition, as the first delegate from Japan. Mike's other DX-peditions were XU1SS in '83, XU9M and 3D2KR in '93, BV9P(Pratas I.) and XZ1A in '95. As a medical doctor, Mike and his friend Isao JH1RNZ, experimented to establish an Asia-Pacific medical satellite network via ETS-5 using L-band transponder, connecting local hospitals in Papua New Guinea, Fiji, Cambodia and Thailand.

About that time two big-dish EME operation, W from Stanford University, and VE3ONT from Algonquin observatory were exciting events. Yoshiro JA4BLC and Takao JH3EAO wrote excellent articles on EME in Japanese radio magazines for JA subscribers. Mike was one of the readers, and felt the lunar cycles are familiar with (as an OBGY doctor).

Since he had learnt things concerning to UHF/microwave already, Mike's next life work (but just a hobby) began immediately. Mike's high power EME license includes 432, 1296, 5760 and 10.45G. As always, larger antennas, and higher power for further distance communication are the aim. 15-m EME echo recording in 2006 was one of the results.

(July, 2024)

K1DS bio

Rick Rosen K1DS

I learned Morse code from my scouting experience and a bit of electronics from my father who was assigned to radar in WW2. First ham licensed 65 years ago. When Incentive licensing was introduced, I upgraded to Amateur Extra, and the incentive was the ability to select a new call sign. My XYL looked over the list of available calls and since I was a Pediatric physician, she suggested I get K1DS. My QSL card read, "When I'm not taking care of KIDS, I'm operating K1DS." My interests in VHF were kindled by club memberships in the Northeast Weak Signal Group and The Packrats. I built a rover van with gear for all bands through 24GHz + LASER. I was always curious about EME and had the opportunity to visit and operate K2UYH and K1JT stations. I have operated EME on and off for 25 years on bands 2m through 13cm, mainly CW

and some digital. From 2010-2020 I was the author of the ARRL EME Contest results commentary for QST. I'm still active using all portable equipment for EME and satellite activity.

K1JT bio

Joe Taylor was first licensed as KN2ITP in 1954, and has since held call signs K2ITP, WA1LXQ, W1HFV, VK2BJX and K1JT. He was Professor of Astronomy at the University of Massachusetts from 1969 to 1981 and since then Professor of Physics at Princeton University, serving there also as Dean of the Faculty for six years. He was awarded a MacArthur Prize Fellowship in 1981 and the Nobel Prize in Physics in 1993 -- the latter for discovery of the first orbiting pulsar, leading to observations that established the existence of gravitational waves. After retirement he has been busy developing and enhancing digital protocols for weak-signal communication by Amateur Radio. He chases DX from 160 meters through the microwave bands.

K6JEY bio

Doug Millar K6JEY

I was licensed in 1957 as a teenager. I have always been interested in VHF and microwaves. In high school I converted an IFF set to a 23cm transceiver and used a 5 gallon lard can as an antenna. Currently the highest band I am on is 122GHz. I wrote the 26th chapter of the ARRL Handbook on Test Equipment and Measurement (1995-2014) as a result of my interest in metrology. I am currently the Technical Coordinator for the Orange Section of the ARRL.

I have been on EME since 1991 and am mostly a builder. I had two 35 element antennas and a Gonset amplifier hot rodded to 500w output and worked one station. A few years later I set up a 432MHz station with 4x22el Yagis and 500+ watts. Still more recently I have been on 144 and 1296MHz with good results. I am currently building a 10GHz station centered on a Meade Alt/AZ telescope mount with a 1m dish and 15 watts output.

Professionally I have been a teacher most of my life and most recently was a Student Teacher Supervisor for the University of Phoenix.

KA6U bio

Peter Van Horne KA6U Bio:

First licensed in 1967 at age 11 WN8FHC.

Operated CW using mostly homebrew equipment.

Extra Class licensed in 1970.

Limited activity for 30 years while focused on family and business interests.

In 2016 started roving for the first time during the National Parks on the Air event.

Visited over 120 venues and made over 6,000 QSO's. Most operations were CW.

My first EME QSO was Dec 12, 2019 on 2M with UA3PTW.

Starting in 2020 I started doing multi-state 2M EME roving trips.

In 2020 - 2021 I activated about 90 US grids and made 3300 2m EME QSOs during roving trips from about 90 grids. Maximum 2M EME QSOs in one day was 75.

Starting in 2022 I decided to shift my roving focus to helping operators complete WAS on VHF, UHF and microwave bands.

I have made multiple multi-state roving trips with a total distance greater than 100,000 miles since 2022 activating 45 US states, most multiple times.

The EME roving trips have helped increase the number of operators with WAS awards on VHF, UHF and microwave bands:

222 - 10 to 18 WAS completed (200 QSOs)

70cm - 24 - 38 WAS completed (600 QSOs)

902 Mhz - 0 - 4 WAS completed (400 QSOs)

23cm - 3 - 28 WAS completed (1400 QSOs)

Current interests include multistate roving trips of 4 to 12 weeks duration.

My roving vehicle includes 500W to 1KW stations for 2M, 222, 70cm, 902Mhz and 23cm. I can operate two bands at the same time. I continue to refine the roving station operation. I can now set up the 902 or 23cm stations in 15 minutes from parking the car until on the Moon. 2M, 222 and 70cm stations can be set up in 20 minutes.

KB2SA bio

KB2SA Bill Siino

Bill (KB2SA) earned his Advanced Class license in 1981 while studying for his B.S.E.E. at Polytechnic Institute of NY.

After graduating in 1983, Bill started R&D work in Long Island, NY developing advanced analog and digital communication systems. He earned his M.S.E.E in 1985 and continued R&D work for the next 10 years.

In 1995, Bill started his own company as a System Architect designing and building big data systems for several OEMs.

Bill experimented on 2 and 10 meters shortly after earning his license in 1981, and was mostly inactive in amateur radio until 2019 when COVID hit. Then Bill had some free time to modify his old backyard telescope pier to hold a small dish. And here we are today.

KB7Q bio

Gene Shea had a 30 year career in both Connecticut and Montana in public education, teaching a variety of subjects from Computer Science to U.S. Government.

In addition, he later served as the IT Manager for his school district and ram-rodged the installation of Internet access into every office and classroom across seven buildings using microwave links.

Post career Gene worked for two seasons in Alaska, and 8 seasons in Yellowstone Park running several campgrounds/RV parks. He has stories about both the wild life and the visitors!

Gene was first licensed as K1QNE in 1960, and made his first EME contact with VE7BQH in 1982 on 2 meters.

Since then Gene has operated moonbounce on six different bands. He has operated EME from Curacao as PJ2T several times on 6M thru 23cm bands.

Gene has lived in Bozeman, Montana since 1979, and is married to his high school sweetheart Joyce. They like to hike, camp, and travel.

KN0WS bio

Biography of Carl Hasbargen (KN0WS)

Carl enjoyed electronics as a boy and built a Heathkit oscillator kit to practice keying morse code at age 12. Unfortunately, even LP phonographic lessons were unable to successfully teach him the code.

He went on to earn his bachelor's degree in electrical engineering in 1982, but proceeded directly to medical school and practiced medicine until retirement in 2021 one year into the covid-19 pandemic.

He wanted to use radio transmitters to track of large hobby rockets, so sat for his radio license in 2010, being grateful that there was no longer a code requirement! Since then, his only radio QSO's have been off the moon, mostly from a remote property in northern Minnesota. Transporting and setting up gear is time-consuming enough that his activity is typically limited to contest weekends. Although he will never set any records with regards to number of contacts, and although none of his gear is optimized, he has enjoyed QSO's on 6 different bands... so far.

This is his first time actually meeting human beings who participate in the EME hobby, and he finds it exciting to do so. Please look for him to introduce yourself at some point during this conference.

N1AV bio

Jay Baack, N1AV

Jay Baack, N1AV became licensed in 1993 after reading a flyer in the

stairwell of Hart Hall for the W1YA University club that said "Do you want to talk to an astronaut on the space station MIR?" this made him stop in his tracks. Jay soon became licensed and was an active member of W1YA for the remainder of his time at UMaine for his undergraduate and graduate degree. After many late evenings standing in the snow in the front yard of his apartment and then home with an arrow antenna in one hand and a HT in the other Jay looked for other challenges. He found them with VHF UHF weaksignal DXing and EME. Jay has a mixed DXCC on the HF bands, and WAS on 6m, 2m, 902 MHz, 1296 MHz, and is closing in on 432 MHz and 222 MHz WAS awards. He is active on EME on 2,222, 432, 902, 1296, 2304, 5 and 10G. Jay completed the FFMA award in just over 3 years, and most recently has found a lot of fun by hauling a ton of gear to the island of Oahu, where he has activated Hawaii on EME with the 1x1 callsign N1V. Jay was the first to ever activate Hawaii on 900 MHz EME, and second on 1296 and 2304 MHz.

Jay's favorite quote. "If it is easy, why bother?"

N5BF bio

Courtney Duncan N5BF has been a licensed radio amateur since 1972 and has been involved in most aspects of the hobby from that time. He retired from NASA's Jet Propulsion Laboratory - California Institute of Technology in July 2021 shortly following the initial demonstration flights of the Mars Helicopter Ingenuity, for which he was telecommunications lead.

His 35-year career included support for space shuttle missions and experiments, GPS radio occultation technology from space, stellar interferometry, deep space navigation software, gravity mapping, Deep Space Network transponders for deep space CubeSats, and finally, Ingenuity telecom.

He is a past president of the San Bernardino Microwave Society (W6IFE), a past official of AMSAT NA and of the JPL Amateur Radio Club (W6VIO), and frequently gives talks on both the Mars Helicopter and on the profound value to society of avocations such as amateur radio.

Courtney was married to Viann WD5EHM (SK 2023) for 45 years and has three children, Viannah KG6GXW, Katherine KG6HUI, John KG6HCO, and two grandchildren. He is also a classically trained pianist and is routinely involved in a variety of musical performances.

NO0T bio

Paul Sobon

Amateur Radio NO0T licensed since 1964, Education: BSc in Physics, MBA, 50+ years experience in the telecom and cable industry with leadership roles in product management, advertising, sales, marketing and public relations.

OK1DFC bio

I was born in September 1958. I built my first tube receiver in 1972 and had an OL5ATU license for young operators since 1974. In 1977 I got my adult license OK1DFC. I made my first QSO over Es in July 1977 and became interested in DX operation on VHF. Since 1981 I experimented with transmitting by bouncing off meteor scatter and built my first SSB-CW transceiver. In 1988 I listened to KB8RQ over the moon for the first time on 144 MHz. In 1992 I started building an EME system for 432 MHz and in 1996 I established the first EME contact on 432 MHz with 4x38el. M2 Yagi. This was followed in 1997 by the 1296 MHz band using a 3.8m parabolic dish. In 2002 I built a 10m parabolic dish antenna and started to work intensively on EME operation. To date I have QRV all bands up to 47 GHz. I have managed to get DXCC 432 and 1296 MHz, also WAS 432 and 1296 MHz and in 432 MHz band also WAZ where I am missing the last zone VK9. Since 2022 I am operating a new antenna for EME. It is an 8m offset dish with F/D 0,457. In 2022 and 2023 I won the ARRL EME on the 1296 MHz band.

In my professional life I work as Senior field application engineer in PPC - BELDEN

OK1TEH bio

Matej Petrzilka, OK1TEH (40)

- master's degree at Czech Technical University
- working in IT branch as system/DC administrator and consultant for Czech government
- specialized in UHF/SHF DXing and contesting for last 24 years
- active on EME since 2004 especially on UHF with small antennas
- preferring CW operation

PA2DW bio



Derk Willem Harms (hence **PA2DWH**, in 2003 limited to PA2DW), was born in 1956 and retired as director of a school for fine-mechanical engineering (scientific instrument building). My carrier started in early 1980-ies as merchant marine Radio-Officer. Maybe due to that I am an avid CW-operator ☺

Picture is made at SAQ, Grimeton/Sweden.

Ever since 1978 I am active on EME. First on 144 MHz and since 2008 only on 23cm. I am chairman of the board at the Radiotelescope Dwingeloo and have been active in VERON (chairman) and IARU (VHF-manager). Recently my regulatory activities are limited to assisting the IARU-Spectrum and Regulatory Liason Committee.

PA3DZL bio

Jac, PA3DZL from The Netherlands

I made my first Moonbounce QSO on 2m with W5UN, beginning 1986. From that moment on, Moonbounce became my passion.

At this moment i'm QRV on 9 different bands Moonbounce
50, 144 and 432Mhz 1.3, 2.3, 3.4, 5.7, 10 and 24Ghz
Made over 6700 Moonbounce QSO's, more than half in CW and the rest in Digital Modes.

I also enjoy building equipment myself, half of it is Home Made.
In recent years i have been helping HAMs with 6 and 3cm SSPA's

W3MIX (K0PRT) bio

Roger Oakey, W3MIX

W3MIX, licensed since 2006. B.S. In Computer Science from California Polytechnic State University, San Luis Obispo, California. Software engineer with 55 years of programming experience. 37 years working in storage for Digital Equipment Corporation, Compaq, Hewlett Packard and Hewlett Packard Enterprise, all through acquisition and all at the same desk.

W7TXT bio

James Morris W7TXT

James, W7TXT, is active in microwave and mm-wave amateur radio experimentation, and is in the process of completing a small 3cm EME station. Most of his microwave activity has been 3cm mountain bounce in the PNW. He recently published a paper in DUBUS on extending the range of the WA1MBA mm-wave quadrupler.

WC8RK bio

Richard WC8RK

Retired Aerospace Engineer. Worked 40 years on gas turbine engines used in aircraft used by airlines and business jets. Got my amateur radio license because my brother and I were bicycling across country, and he wanted me to keep in contact. The fact that I didn't need to pass the Morse code test clinched the deal. My brother Rod WA3ENK bought me an HT and I started building antennas from tape measure Yagis to a 40M Rhombic and 2 x 4 432 Curtain antenna

and I haven't stopped since. Joined up with Joe WA8OGS to see if we could do 70cm EME. We built a portable 2 x 2 array with G0KSC432-15LFA-JT and have made 69 initial contacts so far.

#1 Bernd DL7APV was our first QSO 10/30/2021 and sometime later he asks us to take our portable station to KY so he could get WAS. We did and Bernd got WAS
6/4/2022

#46 was Al K2UYH on 6/12/2022

Joe and I really like building antennas and after attending Central States VHF conference in Little Rock, Arkansas last year we decided that we would get :

DSE-FO432-22 by W8ZN
432UA-18 Xpol by G0KSC
GTV70-19 Xpol by DG7YBN

We planned to test these antennas and build a new 2 x 2 EME array for our portable station with PTFE insulated elements with the best one. That's what we will be demonstrating today

WD5AGO bio

Thomas (Tommy) Henderson, WD5AGO, of Broken Arrow, OK was licensed at his high school ARC in Sand Springs, OK, where Ray, W5HFV was one of his mentors. Just out of high school, an interest in VHF operating and EME developed and he made his first 2 m EME QSO with Dave, K1WHS in 1982. He completed 2m WAS and WAC in 1985, 6cm VUCC in 1986, and 23cm WAC in 1990. Currently, Tommy is active on 70, 23, 13, and 6 cm EME. He was interested in low noise amplifier techniques and began developing LNAs in 1986 which led to fulltime development including 23cm LNAs below 0.3 dB noise figure in 1994. He is also part of the measurement team for the CSVHFS since the early 90's with their noise figure contest. Professionally, Tommy is an associate professor and coordinator for the Electronics program at Tulsa Community College and adjunct associate professor for Oklahoma State University. As a senior member of IEEE, he has developed the schools ARC and IEEE clubs which includes building and racing EV's. He holds a world record in the 1/4 mile of 9.75s at +130 MPH and has appeared on the Discovery Channel "Street Outlaws" as an EV SME. Tommy received his Masters of Engineering Technology from Pittsburg State University. He was awarded the 2001 ARRL Professional Instructor of the Year, the 2007 CSVHFS Mel Wilson, and the 2023 John T. Chambers award.